

Application No. 10/774,197
Amendment "A" dated December 7, 2004
Reply to Office Action mailed October 15, 2004

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An orthodontic bracket comprising:
a bracket base adapted to receive at least one arch wire, the bracket base comprising at least one type of metal, plastic or ceramic;
a hinge; and
a ligation cover hingedly attached to the bracket base such that the cover is movable about a the hinge between an open, non-ligating position relative to the bracket base and a closed, ligating position in which the an arch wire is ligated relative to when received by the bracket base,
the ligation cover comprising at least one type of metal,
the ligation cover covering substantially all of an upper surface of the bracket base when the ligation cover is in the closed, ligating position,
wherein the hinge does not significantly bias the ligation cover such that at least a portion of the cover is able to selectively rotate about the hinge over a substantial angle of rotation between the open, non-ligating position and the closed, ligating position.
2. (Cancelled)
3. (Original) An orthodontic bracket as defined in claim 1, wherein the ligation cover is attached to the bracket base by an elastomeric hinge material.
4. (Original) An orthodontic bracket as defined in claim 1, wherein the ligation cover is attached to the bracket base by a film hinge.
5. (Original) An orthodontic bracket as defined in claim 1, wherein the ligation cover is attached to the bracket base by a mechanical hinge.

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6. (Original) An orthodontic bracket as defined in claim 5, wherein the mechanical hinge comprises at least one of a pin hinge, a rivet, or a screw.

7. (Original) An orthodontic bracket as defined in claim 5, wherein the mechanical hinge comprises interlocking pieces.

8. (Original) An orthodontic bracket as defined in claim 1, wherein the ligation cover is attached to the bracket base by a fiber hinge.

9. (Original) An orthodontic bracket as defined in claim 1, further including a latch mechanism for selectively locking the ligation cover to the bracket base in the closed, ligating position.

10. (Original) An orthodontic bracket as defined in claim 1, further comprising opening means for urging the ligation cover to remain in the open, non-ligating position when in the open, non-ligating position.

11. (Original) An orthodontic bracket as defined in claim 10, the opening means comprising a spring.

12. (Original) An orthodontic bracket as defined in claim 10, the opening means comprising an elastomeric material having memory.

13. (Original) An orthodontic bracket as defined in claim 1, further comprising closing means for urging the ligation cover to remain in the closed, non-ligating position when in the closed, non-ligating position.

14. (Original) An orthodontic bracket as defined in claim 13, the closing means comprising a spring.

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15. (Original) An orthodontic bracket as defined in claim 13, the closing means comprising an elastomeric material having memory.

16. (Original) An orthodontic bracket as defined in claim 1, wherein the bracket base comprises a rigid plastic material.

17. (Original) An orthodontic bracket as defined in claim 1, the bracket base comprising a plurality of archwire slots, at least two of which are at least partially occluded by the ligation cover when in the closed, ligating position.

18. (Original) An orthodontic bracket as defined in claim 1, the bracket base comprising plastic.

19. (Cancelled)

20. (Currently Amended) An orthodontic bracket comprising:

a bracket base having an arch wire slot adapted to receive at least one arch wire, the bracket base comprising at least one type of plastic, ceramic or metal;

a ligation cover integrally attached to the bracket base so as to be movable between an open, non-ligating position relative to the bracket base, in which no portion of the ligation cover remains directly over the arch wire slot, and a closed, ligating position in which the ligation cover at least partially covers the arch wire slot ~~is ligated relative to the bracket base~~, the ligation cover comprising at least one type of metal; and

a film hinge comprising a region of reduced cross-sectional thickness integrally interconnecting the bracket base and ligation cover that permits the ligation cover to be selectively rotated about the film hinge over a substantial angle of rotation between the open, non-ligating position and the closed, ligating position.

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21. (Currently Amended) An orthodontic bracket comprising:

a bracket base adapted to receive at least one arch wire, the bracket base comprising at least one type of plastic, ceramic or metal;

a ligation cover integrally attached to the bracket base so as to be movable between an open, non-ligating position relative to the bracket base and a closed, ligating position in which ~~the an~~ arch wire is ligated ~~relative to~~ when received by the bracket base, the ligation cover comprising at least one type of metal; and

a film hinge comprising a region of reduced cross-sectional thickness integrally interconnecting the bracket base and ligation cover that does not significantly bias the ligation cover toward the closed, ligating position when in the open, non-ligating position.

22. (Original) An orthodontic bracket comprising:

a bracket base having an arch wire slot adapted to receive at least one arch wire, the bracket base comprising at least one type of plastic, ceramic or metal; and

a ligation cover hingedly attached to the bracket base such that the cover is movable about a hinge between an open, non-ligating position, in which no portion of the ligation cover remains directly above the arch wire slot, and a closed, ligating position, in which the ligation cover at least partially covers the arch wire slot,

the ligation cover comprising at least one type of metal, and

the ligation cover covering substantially all of an upper surface of the bracket base when the ligation cover is in the closed, ligating position.

23. (Original) An orthodontic bracket as defined in claim 22, wherein the ligation cover is attached to the bracket base by an elastomeric hinge material.

24. (Original) An orthodontic bracket as defined in claim 22, wherein the ligation cover is attached to the bracket base by a film hinge comprising a region of reduced cross-sectional thickness.

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25. (Original) An orthodontic bracket as defined in claim 22; wherein the ligation cover is attached to the bracket base by a mechanical hinge.

26. (Original) An orthodontic bracket as defined in claim 25, wherein the mechanical hinge comprises at least one of a pin, a rivet, or a screw.

27. (Original) An orthodontic bracket as defined in claim 25, wherein the mechanical hinge comprises interlocking pieces.

28. (Original) An orthodontic bracket as defined in claim 22, wherein the ligation cover is attached to the bracket base by a fiber hinge.

29. (New) An orthodontic bracket comprising:

a bracket base comprising a plurality of arch wire slots adapted to receive an arch wire in each slot, the bracket base comprising at least one type of metal, plastic or ceramic; and

a ligation cover hingedly attached to the bracket base such that the cover is movable about a hinge between an open, non-ligating position relative to two or more of the archwire slots of the bracket base and a closed, ligating position in the ligation cover at least partially covers two or more of the arch wire slots,

the ligation cover comprising at least one type of metal,

the ligation cover covering substantially all of an upper surface of the bracket base when the ligation cover is in the closed, ligating position.

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30. (New) An orthodontic bracket comprising:

a bracket base adapted to receive at least one arch wire, the bracket base comprising at least one type of plastic or ceramic; and

a ligation cover hingedly attached to the bracket base such that the cover is movable about a hinge between an open, non-ligating position relative to the bracket base and a closed, ligating position in which the arch wire is ligated relative to the bracket base, the ligation cover comprising at least one type of metal; and

a latch mechanism for selectively locking the ligation cover over the bracket base in the closed, ligating position, the latch mechanism providing the ligation cover with a single locked position relative to the bracket base.